MEDICAL ASSISTANCE FACILITIES

A DEMONSTRATION PROGRAM TO PROVIDE ACCESS TO HEALTH CARE IN FRONTIER COMMUNITIES

JULY 1993
The mission of the Office of Inspector General (OIG), as mandated by Public Law 95-452, as amended, is to protect the integrity of the Department of Health and Human Services (HHS) programs as well as the health and welfare of beneficiaries served by those programs. This statutory mission is carried out through a nationwide network of audits, investigations, and inspections conducted by three OIG operating components: the Office of Audit Services, the Office of Investigations, and the Office of Evaluation and Inspections. The OIG also informs the Secretary of HHS of program and management problems and recommends courses to correct them.

**OFFICE OF AUDIT SERVICES**

The OIG's Office of Audit Services (OAS) provides all auditing services for HHS, either by conducting audits with its own audit resources or by overseeing audit work done by others. Audits examine the performance of HHS programs and/or its grantees and contractors in carrying out their respective responsibilities and are intended to provide independent assessments of HHS programs and operations in order to reduce waste, abuse, and mismanagement and to promote economy and efficiency throughout the Department.

**OFFICE OF INVESTIGATIONS**

The OIG's Office of Investigations (OI) conducts criminal, civil, and administrative investigations of allegations of wrongdoing in HHS programs or to HHS beneficiaries and of unjust enrichment by providers. The investigative efforts of OI lead to criminal convictions, administrative sanctions, or civil money penalties. The OI also oversees State Medicaid fraud control units which investigate and prosecute fraud and patient abuse in the Medicaid program.

**OFFICE OF EVALUATION AND INSPECTIONS**

The OIG's Office of Evaluation and Inspections (OEI) conducts short-term management and program evaluations (called inspections) that focus on issues of concern to the Department, the Congress, and the public. The findings and recommendations contained in these inspection reports generate rapid, accurate, and up-to-date information on the efficiency, vulnerability, and effectiveness of departmental programs.

OEI's Atlanta Regional Office staff prepared this report under the direction of Jesse J. Flowers, Regional Inspector General and Christopher Koehler, Deputy Regional Inspector General. Principal OEI staff included:

**Atlanta Region**

Maureen Wilce, Project Leader
Ron Kalil
Paula Bowker
Ruth Reiser

**Headquarters**

Cathaleen Ahern

For additional copies of this report, please contact the Atlanta Regional Office at 404-331-4108.
MEDICAL ASSISTANCE FACILITIES

A DEMONSTRATION PROGRAM TO PROVIDE ACCESS TO HEALTH CARE IN FRONTIER COMMUNITIES
EXECUTIVE SUMMARY

PURPOSE

To describe the Health Care Financing Administration's Medical Assistance Facility demonstration program and its effect on access to inpatient health care in frontier Montana.

BACKGROUND

Concerned that hospitals closing in frontier Montana left residents without access to basic health care, the Montana State legislature authorized a Medical Assistance Facility (MAF) program in 1987. The program was designed to provide continued access to health care by converting a full-service hospital into a low-intensity, short-stay health care service center. Montana law allows MAFs to provide up to 96 hours of inpatient care. MAFs must be located more than 35 road miles from the nearest hospital or be located in a county with a population density of no more than 6 residents per square mile.

Montana revised its licensure rules to reduce hospital staffing requirements and adapted other existing standards to the MAF concept. MAFs are allowed to offer any health service for which it is adequately equipped and staffed to perform.

Montana's MAF program received a Health Care Financing Administration (HCFA) demonstration grant to fund planning and program development activities. Also, HCFA authorized a waiver of over forty hospital Conditions of Participation so that MAFs could receive Medicare reimbursement under Medicare Part A on a cost basis. Current HCFA waivers and grant for the MAF program are scheduled to end in 1993.

SCOPE AND METHODOLOGY

In December of 1992, we visited and reviewed MAF operations at each of four Montana communities that had converted formerly closed hospitals into a MAF. The MAFs are located in Circle, Jordan, Terry and Ekalaka. We also reviewed relevant State and Federal legislation, regulations, service records, and other appropriate documentation. We interviewed program officials in Montana, HCFA, and each of the four Montana communities.

FINDINGS

*HCFA's MAF demonstration program provides access to inpatient care in frontier areas without a hospital*

MAFs provide up to 96 hours - or 4 days - of limited inpatient services in four frontier Montana communities. The average length of stay is 2.4 days.
MAFs also provide inpatient care primarily to elderly members of the communities -- 72 percent of MAF patients are over 65 years of age.

Finally, MAFs provide 24-hour emergency health care services and outpatient care to the four communities.

**MAFs facilitate a health care network in frontier areas**

MAFs attract other service providers to the facility. For example, each MAF offers dental services once a week. Special care providers such as physical therapists and mobile mammography units use the MAF as a center to offer care to the community.

MAFs also serve as a hub for a referral network, referring patients to hospitals for advanced care, nursing homes and home health services.

**Flexibility in staffing is critical to success of MAFs**

Non-physicians, such as a physician assistant, admit patients and provide medical care in MAFs. They do so under the supervision of a physician who can be in a different town. Each MAF provides service within the skill level of its employed medical professionals. Also, when a MAF has no patients, it may close. The flexibility allowed in MAFs help attract and retain medical professionals in frontier areas.

**MAFs appear to be cost efficient**

For these four frontier communities, MAFs appear to be cost efficient due to more efficient use of staff and less operating cost when compared to a small underused frontier hospital. Further, MAFs may be located closer to patients, which encourages cost efficient preventive health care and reduces patient transportation cost.

**CONCLUSION**

MAFs hold promise as a viable alternative for frontier community health care. The MAF program is a practical and flexible way to provide access to basic inpatient and emergency medical care in frontier areas -- particularly those that are struggling to keep a failing hospital open, and those that do not have adequate local health care. The results of this review and HCFA's upcoming formal evaluation can be used jointly by HCFA in determining whether to (1) continue the MAF concept in Montana, and (2) apply it in additional frontier communities.
# Table of Contents

## Executive Summary

## Introduction ................................................................. 1

## Findings ........................................................................ 5

- Accessing Care ............................................................... 5
- Facilitating Networks ...................................................... 9
- Staffing Flexibility .......................................................... 10
- Cost Efficiencies .............................................................. 11

## Conclusion ........................................................................ 12

## Appendices

- A: Chronology on MAF Development ................................. A-1
- B: Methodology ................................................................. B-1
INTRODUCTION

PURPOSE

To describe Health Care Financing Administration’s Medical Assistance Facility demonstration program and its effect on access to inpatient health care in frontier Montana.

BACKGROUND

Hospital Closures In Rural Areas

Generally, closure of a rural hospital had little effect on access to medical care for most people. The Office of Inspector General (OIG) reported that 193 rural hospitals closed over a five year period -- 1987 through 1991. In most instances, another hospital was available within 20 miles of a hospital that closed. However, some community residents such as those in frontier communities have difficulty in accessing health care when their hospital closes.

Frontier areas are sparsely populated, and are located in areas with a high need for stand-by care. Typically, frontier communities’ populations include a high percentage of elderly people whose need for medical care may be greater than that for a working-age person. Also, the limited mobility of elderly people makes access to health care in remote areas difficult. Further, the working age population of frontier communities are usually engaged in high risk occupations such as farming and mining. Finally, tourists to some frontier communities often engage in dangerous activities such as rock climbing. When a frontier community does not have a local hospital, needed emergency medical care and acute inpatient services are often much further away than 20 miles.

When referring to hospital care, frontier communities are defined as counties with fewer than 6 persons per square mile. Although 46 percent of the land area in the United States meets this definition, less than 1 percent of the population lives in frontier areas. Nationally, 11 percent of rural hospitals are in frontier areas.

Medical Assistance Facilities In Frontier Montana

One option to a local hospital for health care is a Medical Assistance Facility (MAF). MAFs offer limited inpatient care and a variety of outpatient and emergency services. In the early 1980s, realizing many hospitals in Montana were in danger of closing, the governor of Montana created a task force to study the future of rural hospitals. This task force included State health care officials and representatives from the Montana Hospital Association. The task force concluded the following.

• Physicians may not always be willing and available to work in remote locations.
- Low utilization in some small hospitals does not warrant full services being offered.

- Conditions of Participation, required for hospitals to receive Medicare payment, are too difficult for some communities to fulfill.

- Communities and the State would have to continue pouring money into hospitals to keep them open, using visiting physicians, exhausting nursing staff, perpetually recruiting, and diverting funds from patient care.

- Communities need access to primary and emergency care, which could be provided by something other than a hospital.

By 1987, some small rural hospitals in Montana began closing and residents in those communities were left without basic health care services. At that time, Montana’s State Legislature referred back to the task force recommendations and authorized a MAF program.

The Montana Legislature designed the MAF program to provide continued access to health care by converting what once was a full-service hospital into a low-intensity, short-stay health care service center. Montana law allowed MAFs to provide up to 96 hours (4 days) of inpatient care. MAFs must be located more than 35 road miles from the nearest hospital or be located in a county with a population density of no more than 6 residents per square mile.

The Montana Hospital Association, working with State health care officials, drafted licensure rules for the MAFs. The rules allow care in MAFs to be provided by mid-level practitioners, i.e., physician assistants or nurse practitioners, under the supervision of a medical director, who is a physician. The medical director may be located in another town. Only one MAF staff member must be on duty or on call at all times. The rules also allow MAFs to offer any services provided that the medical director determines the staff has the expertise and the facility has adequate equipment. However, patients with serious illnesses or injuries are stabilized at a MAF and transported to full-service hospitals. In 1989, to allow non-physicians to operate with such independence, the Montana Legislature expanded the role of non-physician providers under its State law.

When possible, the Montana Hospital Association and State health care officials adapted existing standards to MAFs instead of drafting an entirely new set of licensing rules. For example, the lab requirements at MAFs are the same as the Health Care Financing Administration (HCFA) requirements for a Rural Health Clinic (RHC). Further, staffing requirements followed the standards existing at nursing homes.
HCFA's Demonstration Project

The State authorized the Montana Hospital Research and Education Foundation (MHREF), a non-profit organization affiliated with the Montana Hospital Association, to help implement the MAF program. To finance planning of MAFs, MHREF applied for and received a HCFA demonstration grant.

MHREF sent information and invitations to 23 small rural Montana hospitals to participate in the demonstration project. Nine hospitals in Montana agreed to participate in the demonstration, three as MAFs (Jordan, Circle and Ekalaka) and six others as part of a control group. Residents of the three demonstration sites were very receptive to the MAF concept, according to research done by the University of North Dakota.

To be part of the demonstration, each community was required to develop a plan for what the MAF would do and how it would be supported. The MHREF director provided technical assistance to each of the communities, but each community applied to HCFA and to the State health department to receive a Certificate of Need. The demonstration allowed for adding MAF sites that were not included in the original program. Other communities desiring a MAF had to follow the same application process. Terry, Montana did apply, and in January of 1992 became part of the MAF demonstration. On December 31, 1992, a fifth Montana community, Culbertson, received a Medicare provider number as a MAF, but this MAF was not included in our evaluation.

HCFA waived numerous hospital requirements so that MAFs could receive Medicare reimbursement. Over forty Conditions of Participation had to be waived to allow reimbursement under Medicare Part A, the part of Medicare which pays for hospital care. Significantly, HCFA waived many hospital staffing requirements and allowed the Peer Review Organization to have a consultative role in the MAFs.

In 1990, HCFA authorized a cost-based reimbursement system for MAFs. Therefore, MAFs became the first limited-service, acute-care facilities funded for reimbursement. HCFA also agreed to allow Medicaid payments based on the State's law. The HCFA waivers and grant for the MAF program are scheduled to end in 1993.

HCFA selected Abt and Associates to evaluate the demonstration. Ekalaka, Circle and Jordan and the six comparison sites are being studied in a two-part evaluation. The first part, released in 1992, described and compared the communities in detail. It also assessed the activities involved in beginning operation of the three MAFs. The second phase of the evaluation will be released in 1993 and will assess the operation of the MAFs.

A chronology of events in the development of the Medical Assistance Facility program is presented in Appendix A.
SCOPE AND METHODOLOGY

In December of 1992, we visited and reviewed MAF operations in each of the communities -- Circle, Jordan, Terry and Ekalaka. At each community, we interviewed the MAF administrator, health care provider(s), and community leaders. We also visited and interviewed the referral hospital staff for two of the MAFs. We interviewed Montana program officials and HCFA staff, by phone.

Finally, we reviewed relevant State and Federal legislation and regulations, and previous evaluations and cost information submitted to HCFA.

We conducted this inspection in accordance with the Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency.

Appendix B describes our methodology in further detail.
FINDINGS

HCFA'S MAF DEMONSTRATION PROGRAM PROVIDES ACCESS TO NEEDED INPATIENT CARE IN FRONTIER AREAS WITHOUT A HOSPITAL

MAFs Provide Limited Inpatient Acute Care In Frontier Montana Communities

The MAF concept allowed limited-service, inpatient, acute care in eastern Montana to be provided locally. At each of the four MAF Montana communities, access to inpatient care was considered essential because of the long distances and inaccessibility of other health care providers. We briefly describe each of the four MAFs we visited below.

Circle, Montana MAF: The McCone County MAF and Nursing Home opened first, in December 1990. Circle’s hospital had closed in July of 1990. Circle is a town of 450 residents, but the MAF provides access to health care to a county of 1500 people. The nearest hospital, which provides administrative services for the MAF, is 45 miles away. The MAF services are currently provided at two locations. The MAF provides outpatient care, emergency care, x-ray and laboratory services at the former hospital facility in Circle. It provides inpatient care at a nursing home a few miles away. Currently the Circle community is expanding the nursing home to combine all services into one facility. One doctor, who is nearing retirement, continues to practice at the MAF, along with a physician assistant.

Ekalaka, Montana MAF: The Dahl Memorial MAF and Nursing Home serves the 600 residents of Ekalaka and many of the 1000 other people living in Carter County. When Ekalaka’s 15-bed hospital closed in 1988, the nearest hospital care was 35 miles due north. Yet road conditions occasionally made the 35 mile trip to the hospital for inpatient care impossible. Following the hospital’s closure, a RHC opened. The community pursued the MAF option and opened it in June 1991. One physician assistant provides care at the ten-bed inpatient facility. The MAF also offers county public health services and the only pharmacy in the county. Ekalaka is pursuing a Federal grant to extend care to the south end of the county, via a weekly clinic.

Jordan, Montana MAF: The Garfield County Health Center serves one of the most isolated places in the continental United States. The nearest hospital is 85 miles away. The town of Jordan has about 500 people with approximately 1100 others living within the county. Garfield County is about the size of Connecticut. The last doctor ceased practicing in town in 1986 and the Garfield County Memorial Hospital closed. It was the absence of health care options in the community that inspired the local State representative to introduce the MAF concept to the Legislature in 1987. A physician assistant was hired and plans were made to open a two-bed MAF, which is collocated
with a nursing home. In this instance, the community faced delays in opening the MAF. They had difficulties financing renovations to create the MAF. Further, the insurer who had provided the former hospital with malpractice insurance denied coverage to the MAF. Jordan overcame these difficulties and the MAF opened August of 1991.

**Terry, Montana MAF:** The Prairie Community MAF and Nursing Home was the first MAF to open which was not one of the original three demonstration communities. This MAF serves Terry’s 900 residents and many of the 900 other residents of Prairie County. Terry was also the first community to plan on becoming a MAF before its hospital closed. Prairie Community Hospital was failing due to low occupancy and difficulty in retaining physicians. The hospital closed in mid-1991, when the last physician ceased practicing in the community. As soon as it was certified, in January 1992, the MAF opened in the former hospital building. This two-bed MAF is located 37 miles from the nearest hospital, and is staffed by a physician assistant.

**Inpatient Stays At MAFs Averaged 2.4 Days**

The chart below shows the lengths of inpatient stays in all MAFs since each of their opening until December of 1992. State law limits inpatient acute care in MAFs to 96 hours. Inpatient stays at the four community hospitals, prior to closure, also averaged less than 96 hours.

<table>
<thead>
<tr>
<th>Length of Stay</th>
<th>Number of Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 day</td>
<td>54 (37%)</td>
</tr>
<tr>
<td>2 days</td>
<td>23 (16%)</td>
</tr>
<tr>
<td>3 days</td>
<td>31 (21%)</td>
</tr>
<tr>
<td>4 days</td>
<td>39 (26%)</td>
</tr>
<tr>
<td><strong>Average:</strong></td>
<td><strong>2.4 days</strong></td>
</tr>
<tr>
<td><strong>Total Admissions</strong></td>
<td><strong>147</strong></td>
</tr>
</tbody>
</table>
MAFs Provide Care For A Variety Of Illnesses and Injuries

Within the four-day limit on inpatient care, patients can receive care for a variety of illnesses. The chart below shows the percentage of patients receiving medical services by type of illnesses or injuries.

<table>
<thead>
<tr>
<th>Reasons for Inpatient Admissions to MAFs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory Illnesses</td>
<td>24%</td>
</tr>
<tr>
<td>Gastrointestinal Diseases</td>
<td>17%</td>
</tr>
<tr>
<td>Trauma</td>
<td>13%</td>
</tr>
<tr>
<td>Neurological Disorders</td>
<td>8%</td>
</tr>
<tr>
<td>Previously-diagnosed Cancer</td>
<td>7%</td>
</tr>
<tr>
<td>Cardiovascular Disease</td>
<td>5%</td>
</tr>
<tr>
<td>Urinary Disorders</td>
<td>4%</td>
</tr>
<tr>
<td>Metabolic Diseases</td>
<td>4%</td>
</tr>
<tr>
<td>Psychiatric Disorders</td>
<td>4%</td>
</tr>
<tr>
<td>Infections</td>
<td>3%</td>
</tr>
<tr>
<td>Other Illnesses</td>
<td>11%</td>
</tr>
</tbody>
</table>

Although MAFs are not prohibited from performing surgeries, none of the four MAFs offer any surgery. The physician at the Circle MAF has chosen not to continue his surgical practice. Physician assistants at the four MAFs are not trained to perform surgery independently. Patients needing surgeries are referred to other facilities.

MAFs Provide Inpatient Care Primarily To The Elderly

The MAFs provide inpatient services primarily to elderly members of the communities. The following chart shows basic demographic information on patients admitted to the four Montana MAFs.

<table>
<thead>
<tr>
<th>MAF Patient Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex:</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

MAF Guidelines Are Designed To Assure That Admissions Are Appropriate

MAFs provide treatment within the scope of the services offered. To assure that only appropriate illnesses are treated, MAFs follow strict procedural requirements. The physician or physician assistant at a MAF must notify the Peer Review Organization
(PRO) before any patient is admitted. The medical professional on duty telephones the PRO and describes a patient’s condition to a nurse or a physician at the PRO. Together they decide (1) if the patient requires treatment which is within the authorized scope of services the MAF is capable of providing, and (2) if the proposed treatment is medically necessary. Further, if a physician assistant is admitting a patient, the MAF’s medical director, who is a physician, is also consulted by telephone. The medical director is sometimes called by the PRO to discuss cases as well. The consultation with the PRO offers a second opinion on each case and helps assure that the MAF’s later insurance claim will not be denied upon review. Although this is not the customary role of a PRO, HCFA allowed it for the MAF demonstration.

The chart on the right shows what happens when a patient comes to a MAF.

After admission, medical professionals at MAFs continue communication with other medical professionals. To illustrate, the physician or physician assistant at a MAF calls the PRO to consult on the appropriateness of a treatment plan. In routine cases the PRO is again called between 48 and 72 hours into the patient’s stay to consult on discharge planning in accordance with the rules of the program. In more unusual cases, the medical director, the PRO, and specialists in other hospitals will all be consulted. MAFs routinely send medical test results to other hospitals to confirm that patients are being treated correctly. In this way the PRO monitors the care of all MAF patients. Although there was some confusion concerning the skill levels of the physician assistants for the first few cases, the four MAFs report no problems working with the PRO.

MAFs Also Provide Emergency And Outpatient Health Care Services To Their Communities

Because of the institutional presence of a MAF in the four Montana communities, other health services are available. In addition to inpatient medical care, MAFs
provide a variety of emergency health care services. All MAFs offer 24-hour emergency services, and all four MAFs use the former hospital emergency room to treat patients. MAFs stabilize and transfer patients requiring more advanced care, such as patients in cardiac arrest or victims of life-threatening accidents. MAFs also offer basic laboratory and x-ray services.

Although not required to do so under Montana law, the four MAFs offer outpatient care. In the MAFs, the former hospital emergency room is also used for outpatient care. Further, the physician at the Circle MAF and physician assistants at all MAFs provided general medical services, including outpatient care, through their general practice in the community. The physician assistants at each of the MAFs told us that through the MAF and their private practices, they treat as many as one hundred patients a week on an outpatient basis. Nurses at the four MAFs also provide public health services and home health care in the community.

MAFS FACILITATE A HEALTH CARE NETWORK IN FRONTIER AREAS

All four MAFs have encouraged other services to locate at the facility. The former hospital space is used for other health services which would not be available to the community otherwise. In Circle, the new building which is being constructed will provide space for additional services. Each of the four MAFs offers dental services one day a week. Special care service providers such as physical therapists and mobile mammography units are allowed to use the facilities to provide care to the community on a visiting basis. The Montana Mental Health Service provides counseling services to the community from the MAF facility. Public health offices are also located in the centers. In Ekalaka, the physician assistant and staff at the MAF provide public health services through a contract with the community. Also, Ekalaka’s pharmacy, which was threatened with closure, is now operated out of the MAF center.

For services which the MAF cannot provide, all four of the MAFs have formal referral agreements with transfer facilities. For example, if a patient comes to the MAF and needs to be transferred for more sophisticated care than the MAF is able to offer, medical professionals at the MAF stabilize the patient and obtain emergency ambulance services for transfer to needed care. Each MAF has formalized agreements with several hospitals. All MAFs have agreements with the nearest hospitals as well as hospitals in Billings, Montana, over a hundred miles away. Therefore, MAFs transfer patients directly to the hospital that offers the level of care the patients need. If several hospitals offer the same level of care, MAF staff respect the patient’s choice. The MAF staff arranges transfers for a patient via road or fixed-wing plane to hospitals offering the appropriate level of care. The four MAFs report no problems transferring patients to other facilities.

Each of the four MAFs also has agreements with nursing home facilities. Local nursing homes rely on the MAFs for health care services for their elderly patients. Each of the four MAFs is collocated with a nursing home. By collocating, MAFs and nursing homes are able to share staff. This arrangement allows nurses working at the
nursing home to also work at the MAF, maximizing efficiency. Shared staffing also coordinates patient treatment.

Finally, MAFs contract with home health care providers to offer a referral network to appropriate non-acute care. Because of the requirements to have referral agreements, the boards of the MAFs have arranged for a full range of services to be available through referrals to the community. For example, home health care services were not available in Circle, before the MAF developed. Now the MAF contracts with a home health agency in Wibaux, Montana to provide services as needed.

FLEXIBILITY IN STAFFING IS CRITICAL TO SUCCESS OF MAFS

MAFs Allow An Expanded Role For Non-physicians

Non-physician providers admit patients to the MAF. HCFA accepted Montana State policies which expanded the role of physician assistants and nurse practitioners. This meant that even though the four Montana communities were unable to recruit and support a resident physician who could operate a hospital, they could still have inpatient care available. In accordance with Montana rules, each MAF has a medical director who is a physician. However, except for the Circle MAF, the medical directors are located in a different town. The medical directors are required to visit a MAF once a month to review patient charts, but in practice they visit more frequently and are regularly consulted.

The medical directors are the sponsoring physicians for the physician assistants working at the MAFs. In accordance with the MAF rules, the sponsoring physicians decide what services the physician assistants are allowed to perform. The physician assistants at the four MAFs are highly experienced professionals. The medical directors allow them to independently perform those services for which they are trained.

MAFs Have Unique Staffing Requirements

MAFs have unique staffing arrangements because HCFA waived many staffing requirements. MAFs are not staffed after regular working hours when no patients have been admitted for inpatient care. Under the Medicare hospital Conditions of Participation, registered nurses must always be on duty. This works in hospitals since most hospitals always have patients. The MAFs, however, frequently have times when no patients are under care. The MAFs, on average, have patients under care only about 17 percent of operating days. When no patients have been admitted, MAF medical staff do not have to be present, but are on-call.

When a patient has been admitted, the four MAFs provide 24-hour-a-day nursing care. A registered nurse is on duty at least 8 hours a day, and licensed practical nurses provide care at other times. The MAFs have an arrangement with the collocated nursing homes to share nursing staff. As a result, nurses at the nursing
home also monitor patients admitted to the MAF. The nursing home nurses also
cover the emergency care at the MAF until the on-call MAF medical staff arrive.

Because the medical professionals at the MAF are the only providers in the
communities, they are always "on-call" to provide emergency medical care. However,
MAFs have modified rules to ease the burden on the medical professionals. The
physician or non-physician provider must be within one hour of the MAF, rather than
actually in the facility, and a registered nurse must be within 20 minutes of the MAF.
Each MAF also has agreements with local ambulance services that if the medical
professionals are not available for any reason, the patient will be transported directly
to another emergency care facility.

The Flexibility Of MAFs Attracts And Helps Retain Medical Professionals In Frontier
Areas

The MAFs, by virtue of being able to offer varied practice settings, are an attractive
worksites. Consequently, administrators told us they can recruit and retain staff more
easily. The physician assistants said they came to work specifically in a MAF because
they wanted an opportunity to practice more independently. Nurses told us that their
morale has increased because of the ability to practice inpatient and emergency skills.
Administrators told us that some staff members are choosing to obtain more training,
such as advanced degrees or specific skills to broaden their role at the MAF. For
example, in Ekalaka the physician assistant has already trained to perform x-rays.

Retention of staff allows the provider and patient to develop a trusting relationship.
An early opinion study by MHREF on the MAF concept showed that such a patient-
provider relationship is essential to the MAF's success.

MAFS APPEAR TO BE COST EFFICIENT

Although data is limited, MAFs appear to be cost efficient for the four communities
when compared to a small underused frontier hospital. Community officials in the
four Montana communities told us that the MAFs have reduced costs. They noted
that under the MAF concept they are able to use staff more efficiently and operate at
less cost than before their former hospital closed. Each community subsidizes the
MAFs with tax dollars. Community members see the efficiencies of the MAF as a
way to provide medical care without the high tax burden of their former hospital.
This is especially important as the tax base has declined in some communities. Also,
the four communities are finding that some of the money not spent on staffing and
maintaining a full-service hospital can be spent on staff training.

MAFs save transportation expenses for patients because they do not have to travel
great distances for care. The cost of and access to transportation are often problems
for elderly patients such as those treated in MAFs. The ability to treat and stabilize
patients locally in cases of emergency may also reduce ambulance and air ambulance
costs. Further, it allows provision of care faster.
Critical to success of the MAFs was the waiver granted by HCFA which allowed MAFs to receive cost based reimbursement rather than reimbursement under the Diagnostic Related Groups (DRG) system that is used to pay for most Medicare services at hospitals. Not enough data is available yet to measure average MAF costs against comparable DRG payments; however, the costs could be lower. First, MAFs employ fewer people. Second, MAFs can close when no patient is present. Third, rules allow non-physicians and non-RNs to provide care which should lower staffing costs. Fourth, cross-utilizing staff and services between the nursing facility and the MAF reduces overhead and increases efficiency. Finally, the MAF, by specifically limiting its services, may forgo expensive and little-used equipment that would also increase costs.

Although not easily quantifiable, community officials said that MAFs financially benefit the community in other ways. They said that if receiving medical care is convenient and it is provided by familiar people in a familiar environment, people usually choose to obtain care for an illness sooner. Treating an illness before a crisis occurs is better for the patient and usually more cost-effective. Further, they said that before the MAF, patients tended to (1) postpone care for an illness rather than travel long distances for it, and (2) forgo follow-up and preventive care services.

CONCLUSION

The isolation of frontier communities can make access to health care difficult. Many frontier communities cannot adequately support a hospital, but have a need for standby inpatient and emergency care. Some communities may be going to extreme measures to save underused hospitals because they know of no other way to retain medical care.

MAFs hold promise as a viable alternative for frontier community health care. The MAF program is a practical, flexible, and efficient way to provide local access to basic inpatient, outpatient, and emergency care in frontier areas. Further, MAFs offer an institutional presence which fosters other health care services, such as nursing homes, pharmacy services and visiting health care services.

The results of this review and HCFA's upcoming formal evaluation can be used jointly by HCFA in determining whether to (1) continue with the MAF concept, and (2) apply it in additional frontier communities.
### Chronology Showing Development Of The Medical Assistance Facility Program In Montana

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early 1980's</td>
<td>Governor of Montana created a task force to examine rural health problems</td>
</tr>
<tr>
<td>December 1986</td>
<td>Garfield County Memorial Hospital in Jordan closed</td>
</tr>
<tr>
<td>February 1987</td>
<td>Montana's State Legislature authorized a Medical Assistance Facility (MAF) program and Montana Hospital Research and Education Foundation (MHREF), a non-profit organization affiliated with the Montana Hospital Association, was authorized to help implement the MAF program</td>
</tr>
<tr>
<td>June 1987</td>
<td>Dahl Memorial Hospital in Ekalaka closed</td>
</tr>
<tr>
<td>June 1988</td>
<td>HCFA funded a planning and development demonstration grant</td>
</tr>
<tr>
<td>January 1989</td>
<td>MHREF sent letters inviting small rural hospitals to participate in the demonstration</td>
</tr>
<tr>
<td>February 1989</td>
<td>Montana legislature expanded the role of non-physician providers under State law, allowing them to prescribe medicines and to provide any service their sponsoring physician authorizes</td>
</tr>
<tr>
<td>March 1989</td>
<td>Nine hospitals in Montana agreed to participate in the demonstration, three as MAFs (Jordan, Circle and Ekalaka) and six others as part of a control group</td>
</tr>
<tr>
<td>April 1990</td>
<td>HCFA authorized a cost-based reimbursement system for MAFs</td>
</tr>
<tr>
<td>July 1990</td>
<td>McCone County Hospital in Circle closed</td>
</tr>
<tr>
<td>December 1990</td>
<td>HCFA waived over forty Conditions of Participation so that MAFs could receive Medicare reimbursements under Medicare Part A</td>
</tr>
<tr>
<td>December 1990</td>
<td>The first MAF in Circle opened</td>
</tr>
<tr>
<td>June 1991</td>
<td>MAF in Ekalaka opened</td>
</tr>
<tr>
<td>August 1991</td>
<td>Jordan's MAF opened</td>
</tr>
<tr>
<td>January 1992</td>
<td>MAF in Terry opened</td>
</tr>
<tr>
<td>December 1992</td>
<td>Roosevelt Memorial Hospital in Culbertson converted to a MAF</td>
</tr>
</tbody>
</table>
APPENDIX B

METHODOLOGY

To understand the Medical Assistance Facility (MAF) concept, we reviewed Federal and State legislation and regulations. We interviewed Montana State officials and Health Care Financing Administration (HCFA) staff to determine how the MAF concept was created and what it is expected to accomplish.

To determine what factors led to implementation of the MAF concept, we interviewed community leaders and health care professionals who were instrumental in converting a former hospital into a MAF.

Using standardized interview guides, we focused interviews with community members, health care professionals and State and HCFA staff on the following issues.

- Community concern about a hospital's closing
- Conceptualization and communication of converting a former hospital into a MAF
- Application for HCFA funding
- Establishing associations and protocols with other hospitals which will accept transfer patients
- Conversion of a physical facility to meet MAF requirements
- Change in the health care community necessary to accommodate new arrangements created by a MAF

To determine what services are provided by MAFs in the four Montana communities of Circle, Ekalaka, Jordan, and Terry, we reviewed legislation, regulations, service records and correspondence files. We also reviewed the health care services prescribed at each former hospital as recorded in HCFA's Hospital Cost Reporting Information System (HCRIS). We then compared those services to the services provided through the MAF concept. In this manner, we could identify services that were formerly provided by the hospitals, but not provided by the MAFs.

To determine other health services available to a community and where they are located, we interviewed health care providers and community leaders.
To describe the health care network role of MAFs, we reviewed records, such as referrals, and interviewed health care professionals in hospitals receiving transfer patients.

To determine a community's perspective on the adequacy and appropriateness of MAF's services we interviewed health care professionals and community leaders in each of the four Montana communities. We also determined their perspectives on how standards and processes they followed affected implementation of the MAF program. We interviewed State and HCFA staff to determine their perspectives on successes of MAFs. We also gathered information on access to care issues from Montana and national sources. Finally, we reviewed the first HCFA evaluation of the MAFs.

To determine which services are used by residents in a community served by a MAF, we used records and documents of both the former hospital and the MAF. We supplemented this information with interviews with health care professionals.